SEQ ID NO: 1 is a primate IL-B50 nucleic acid sequence.
SEQ ID NO: 2 is a primate IL-B50 amino acid sequence.
SEQ ID NO: 3 is supplemented primate IL-B50 nucleic acid sequence.
SEQ ID NO: 4 is supplemented primate IL-B50 amino acid sequence.
SEQ ID NO: 5 is sheep IL-7 amino acid sequence.
SEQ ID NO: 6 is bovine IL-7 amino acid sequence.
SEQ ID NO: 7 is human IL-7 amino acid sequence.
SEQ ID NO: 8 is mouse IL-7 amino acid sequence.
SEQ ID NO: 9 is rat IL-7 amino acid sequence.

<110> Bazan, J. Fernando
      Rene de Waal Malefyt
      Yong-Jun Liu
      Vassili Soumelis

<120> Mammalian Cytokines; Related Reagents and Methods

<130> DX0903K1

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att aaa gca gcc tat ctc agt act att tct aaa gac ctg att aca tat    196
Ile Lys Ala Ala Tyr Leu Ser Thr Ile Ser Lys Asp Leu Ile Thr Tyr
             15              20                     25

atg agt ggg acc aaa agt acc gag ttc aac aac acc gtc tct tgt agc    244
Met Ser Gly Thr Lys Ser Thr Glu Phe Asn Asn Thr Val Ser Cys Ser
         30              35                  40

aat cgg cca cat tgc ctt act gaa atc cag agc cta acc ttc aat ccc    292
Asn Arg Pro His Cys Leu Thr Glu Ile Gln Ser Leu Thr Phe Asn Pro
         45              50                  55

aac cgc cgn gtg cgg tcg ctc gcc aaa gaa atg ttc gcc atg aaa act    340
Asn Arg Xaa Val Arg Ser Leu Ala Lys Glu Met Phe Ala Met Lys Thr
     60              65              70

aag gct gcc tta gct atc tgg tgc cca ggc tat tcg gaa act cag ata    388
Lys Ala Ala Leu Ala Ile Trp Cys Pro Gly Tyr Ser Glu Thr Gln Ile
 75              80              85                     90

aat gct act cag gca atg aag aag agg aga aaa agg aaa gtc aca acc    436
Asn Ala Thr Gln Ala Met Lys Lys Arg Arg Lys Arg Lys Val Thr Thr
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aat aaa tgt ctg gaa caa gtg tca caa tta aa                         468
Asn Lys Cys Leu Glu Gln Val Ser Gln Leu
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Val Ser Phe Arg Lys Ile Phe Ile Leu Gln Leu Val Gly Leu Val Leu
         -15              -10                 -5

Thr Tyr Asp Phe Thr Asn Cys Asp Phe Glu Lys Ile Lys Ala Ala Tyr
 -1   1              5                 10                    15
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Ser Leu Ala Lys Glu Met Phe Ala Met Lys Thr Lys Ala Ala Leu Ala
    65               70               75

Ile Trp Cys Pro Gly Tyr Ser Glu Thr Gln Ile Asn Ala Thr Gln Ala
 80               85               90               95
Met Lys Lys Arg Arg Lys Arg Lys Val Thr Thr Asn Lys Cys Leu Glu
             100              105              110

Gln Val Ser Gln Leu
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atc ttc atc tta caa ctt gta ggg ctg gtg tta act tac gac ttc act    96
Ile Phe Ile Leu Gln Leu Val Gly Leu Val Leu Thr Tyr Asp Phe Thr
             -10               -5              -1   1

aac tgt gac ttt gag aag att aaa gca gcc tat ctc agt act att tct   144
Asn Cys Asp Phe Glu Lys Ile Lys Ala Ala Tyr Leu Ser Thr Ile Ser
  5               10               15               20

aaa gac ctg att aca tat atg agt ggg acc aaa agt acc gag ttc aac   192
Lys Asp Leu Ile Thr Tyr Met Ser Gly Thr Lys Ser Thr Glu Phe Asn
                 25               30               35

aac acc gtc tct tgt agc aat cgg cca cat tgc ctt act gaa atc cag   240
Asn Thr Val Ser Cys Ser Asn Arg Pro His Cys Leu Thr Glu Ile Gln
             40               45               50

agt cta acc ttc aat cct acc gca ggt tgc gcg tcg ttc gcc aaa gaa   288
Ser Leu Thr Phe Asn Pro Thr Ala Gly Cys Ala Ser Leu Ala Lys Glu




tat tgg gaa att cat ata att ttt aat aag gca atg aaa aat att tta   336
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aaa agg aaa gtc aca acc aat aaa tgt ctg gaa caa gtg tca caa tta      432
Lys Arg Lys Val Thr Thr Asn Lys Cys Leu Glu Gln Val Ser Gln Leu
                105                 110                 115

caa gga ttg tgg cgt cgc ttc aat cga cct tta ctg aaa caa cag taa      480
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            -10                  -5                  -1   1

Asn Cys Asp Phe Glu Lys Ile Lys Ala Ala Tyr Leu Ser Thr Ile Ser
  5                 10                  15                  20

Lys Asp Leu Ile Thr Tyr Met Ser Gly Thr Lys Ser Thr Glu Phe Asn
                25                  30                  35

Asn Thr Val Ser Cys Ser Asn Arg Pro His Cys Leu Thr Glu Ile Gln
                40                  45                  50

Ser Leu Thr Phe Asn Pro Thr Ala Gly Cys Ala Ser Leu Ala Lys Glu
            55                  60                  65

Met Phe Ala Met Lys Thr Lys Ala Ala Leu Ala Ile Trp Cys Pro Gly
            70                  75                  80

Tyr Ser Glu Thr Gln Ile Asn Ala Thr Gln Ala Met Lys Lys Arg Arg
            85                  90                  95                 100

Lys Arg Lys Val Thr Thr Asn Lys Cys Leu Glu Gln Val Ser Gln Leu
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Gln Gly Leu Trp Arg Arg Phe Asn Arg Pro Leu Leu Lys Gln Gln
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          50                  55                  60

Phe Phe Lys Lys His Ser Cys Asp Asp Asn Lys Glu Ala Ser Phe Leu
  65                  70                  75                  80

Asn Arg Ala Ala Arg Lys Leu Lys Gln Phe Leu Lys Met Asn Ile Ser
                  85                  90                  95

Asp Asp Phe Lys Leu His Leu Ser Thr Val Ser Gln Gly Thr Leu Thr
              100                 105                 110

Leu Leu Asn Cys Thr Ser Lys Gly Lys Gly Arg Lys Pro Pro Ser Leu
              115                 120                 125

Gly Glu Ala Gln Pro Thr Lys Asn Leu Glu Glu Asn Lys Ser Leu Lys
          130                 135                 140

Glu Gln Arg Lys Gln Asn Asp Leu Cys Phe Leu Lys Ile Leu Leu Gln
145                 150                 155                 160

Lys Ile Lys Thr Cys Trp Asn Lys Ile Leu Arg Gly Ile Thr Glu His
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<210> 6
<211> 176
<212> PRT
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Leu Val Leu Leu Pro Val Ala Ser Ser Asp Cys Asp Ile Ser Gly Lys
          20                  25                  30

Asp Gly Gly Ala Tyr Gln Asn Val Leu Met Val Asn Ile Asp Asp Leu
          35                  40                  45

Asp Asn Met Ile Asn Phe Asp Ser Asn Cys Leu Asn Asn Glu Pro Asn
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Asn Arg Ala Ala Arg Lys Leu Lys Gln Phe Leu Lys Met Asn Ile Ser
                  85                  90                  95
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Leu Leu Asn Cys Thr Ser Lys Gly Lys Gly Arg Lys Pro Pro Ser Leu
      115   120   125

Ser Glu Ala Gln Pro Thr Lys Asn Leu Glu Glu Asn Lys Ser Ser Lys
      130   135   140

Glu Gln Lys Lys Gln Asn Asp Leu Cys Phe Leu Lys Ile Leu Leu Gln
145   150   155   160

Lys Ile Lys Thr Cys Trp Asn Lys Ile Leu Arg Gly Ile Lys Glu His
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<210> 7
<211> 177
<212> PRT
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Leu Val Leu Leu Pro Val Ala Ser Ser Asp Cys Asp Ile Glu Gly Lys
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Asp Gly Lys Gln Tyr Glu Ser Val Leu Met Val Ser Ile Asp Gln Leu
            35   40   45

Leu Asp Ser Met Lys Glu Ile Gly Ser Asn Cys Leu Asn Asn Glu Phe
      50   55   60

Asn Phe Phe Lys Arg His Ile Cys Asp Ala Asn Lys Glu Gly Met Phe
 65   70   75   80

Leu Phe Arg Ala Ala Arg Lys Leu Arg Gln Phe Leu Lys Met Asn Ser
                  85   90   95

Thr Gly Asp Phe Asp Leu His Leu Leu Lys Val Ser Glu Gly Thr Thr
                  100   105   110

Ile Leu Leu Asn Cys Thr Gly Gln Val Lys Gly Arg Lys Pro Ala Ala
      115   120   125

Leu Gly Glu Ala Gln Pro Thr Lys Ser Leu Glu Glu Asn Lys Ser Leu
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<211> 154
<212> PRT
<213> rodent

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Leu Val Leu Leu Pro Val Thr Ser Ser Glu Cys His Ile Lys Asp Lys
            20   25   30

Glu Gly Lys Ala Tyr Glu Ser Val Leu Met Ile Ser Ile Asp Glu Leu
        35   40   45

Asp Lys Met Thr Gly Thr Asp Ser Asn Cys Pro Asn Asn Glu Pro Asn
    50   55   60

Phe Phe Arg Lys His Val Cys Asp Asp Thr Lys Glu Ala Ala Phe Leu
65   70   75   80

Asn Arg Ala Ala Arg Lys Leu Lys Gln Phe Leu Lys Met Asn Ile Ser
            85   90   95

Glu Glu Phe Asn Val His Leu Leu Thr Val Ser Gln Gly Thr Gln Thr
            100   105   110

Leu Val Asn Cys Thr Ser Lys Glu Glu Lys Asn Val Lys Glu Gln Lys
        115   120   125

Lys Asn Asp Ala Cys Phe Leu Lys Arg Leu Leu Arg Glu Ile Lys Thr
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Cys Trp Asn Lys Ile Leu Lys Gly Ser Ile
145   150

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<211> 154
<212> PRT
<213> rodent

<400> 9
Met Phe His Val Ser Phe Arg Tyr Ile Phe Gly Ile Pro Pro Leu Ile
1   5   10   15

Asp Lys Met Thr Gly Thr Asp Ser Asn Cys Pro Asn Asn Glu Pro Asn

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65                  70              75                      80

Asn Arg Ala Ala Arg Lys Leu Arg Gln Phe Leu Lys Met Asn Ile Ser
                85              90                  95

Glu Glu Phe Asn Asp His Leu Leu Arg Val Ser Asp Gly Thr Gln Thr
            100             105                 110

Leu Val Asn Cys Thr Ser Lys Glu Glu Lys Thr Ile Lys Glu Gln Lys
        115             120                 125

Lys Asn Asp Pro Cys Phe Leu Lys Arg Leu Leu Arg Glu Ile Lys Thr
    130             135                 140

Cys Trp Asn Lys Ile Leu Lys Gly Ser Ile
145                 150
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